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File Code: 3420 **Date:** August 23, 2005
Route To: (2400)

Subject: Priest Draw Aspen Restoration

To: District Ranger, Mormon Lake RD, Coconino NF

I recently met with Jim Rolf, Silviculturist, and Patty Ringle, Forester, to view the proposed Priest Draw Aspen Restoration Project, Mormon Lake Ranger District. This letter is my assessment of the health of aspen in the proposed treatment area.

Aspen in Priest Draw, like many aspen stands on the District, are in a state of decline marked by large scale branch dieback and tree mortality. Although the roots of recently killed aspen typically sucker to produce a new generation of trees, monitoring surveys I have conducted across northern Arizona over the past 15 years have shown aspen often attempts to regenerate, but the sprouts disappear due to heavy browse by ungulates. The Priest Draw area is an exception, having a population of fairly healthy suckers that are up to 4 feet in height. Browsing activity is currently low, which and believed to be associated with heavy recreation use by rock climbers and campers. It is just a matter of time before aspen regeneration in Priest Draw is browsed to death.

Rocky mountain elk are considered the primary threat to the long-term survivability of aspen, because they impact aspen in many ways. Elk have a height advantage over other ungulates and are able to reach higher in the crowns of saplings, often snapping the main bole and causing mortality. On 3 to 6 inch diameter trees, elk rub antlers creating wounds that allow entry for canker and wood decay fungi. These trees snap and fall over before reaching maturity. Elk also gnaw or strip the bark (a.k.a. barking) of larger trees, allowing the entry of insects such as the bronze poplar borer.

In addition to the removal of all conifers less than 16 inches in diameter in the project, Jim and Patty propose to install three exclosure fences. Although fencing is expensive to install and time consuming to maintain, exclosures are the only known treatment to effectively protect aspen regeneration from ungulate browsing.

/s/ Mary Lou Fairweather
MARY LOU FAIRWEATHER
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cc:
Patricia Ringle
James Rolf
John Anhold